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## ABSTRACT

This annotated bibliography, part of a series on rehabilitation of Native Americans who are disabled, focuses on health care issues. The bibliography lists 34 books, journal articles, and reports published between 1971 and 1985. Entries are arranged alphabetically by author. (JDD)

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Native American Rehabilitation:  
A Bibliographic Series, No. 6

Health Care Issues

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**Uts' Itishtaan' 1**

**Keres Word: Thoughts or concepts to consider**

**Research Report**

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**Native American Rehabilitation:  
A Bibliographic Series, No. 6**

**Health Care Issues**

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## Introduction

The information listed here is intended to provide consumers, policy makers, direct service providers, researchers, advocates, and parents with a synthesis of knowledge regarding key issues related to the rehabilitation of Native Americans who are disabled. The Bibliographic Series consists of seven key topical areas including: (a) assessment issues; (b) rehabilitation issues; (c) special education issues; (d) family issues; (e) mental health issues; (f) health care issues; and (g) medically related disability issues.

### Selection Process

Materials for inclusion in the Bibliographic Series were identified through a comprehensive search of relevant databases. The years of the computerized search included 1966 to 1986, varying across databases, depending on the availability of computerized material and the comprehensiveness of the database within this time period. The databases included in the search were: (a) ERIC (Educational Resource Information Center); (b) BRS (Bibliographical Retrieval Services: attitudes, education, intellectual development, language, and rehabilitation); (c) NARIC (National Association of Rehabilitation Information Center: RehabData); (d) Dialog (ABI/Inform, Medline, PsycInfo, Sociological Abstracts); and (e) FAMULUS.

In addition, materials identified by the Native American Research and Training Center research staff through journal content analysis were included. Materials identified through this first step were then individually reviewed for inclusion based on the criteria outlined below.

### Selection Criteria

Materials were selected for inclusion in the Bibliographic Series if the information was relevant to one of the seven identified topical areas. In addition, material that was identified from non-computerized sources and consisted of incomplete bibliographic information such that the material could not be located

through assistance from the library, or by writing the authors, was excluded.

Abstracts were rewritten when necessary to provide further clarity of the study findings. The materials selected here represent what is believed to be a comprehensive summary of information related to the seven topical areas.

## HEALTH CARE

**Bain, H. W. (1982). Morbidity in Canadian Indian and non-Indian children in the first year of life. Canadian Medical Association Journal, 126(3), 240-252.**

Although the author described some positive changes in health care delivery to Native Americans residing in rural areas, overall health of rural residents is still poor. The need existed for a total community approach to health by the residents themselves. Some of the needs associated with health problems among natives can be corrected by providing better housing, safe water supplies, sewage disposal systems, job opportunities for adults and recreational facilities for their children. Local residents need training to be involved in preventative measures to address overall quality of health.

**Bates, V. E. (1982). Traditional healing and western health care: A case against formal integration. Los Angeles, CA: Annual Convention of the American Psychological Association. (ERIC Document Reproduction Service No. ED 210 138)**

The author advanced the argument that state heteronomy (alternations of generations) is inadvisable yet inevitable, should the funding and power structure behind Western health care systems be formally integrated with the traditional American Indian healing system. A comparison was made of the similarities and differences between the two systems of health care and healing in order to generate thoughts about etiology, role expectations, and situational factors that are traceable to the treatment characteristics of the two systems. Strengths in use of traditional healing systems were identified. Tables provided a comparison and contrast between the Western and traditional health systems of divergent orders of information, including causation, diagnosis, roles, and treatment processes.

Caution was expressed regarding non-medical interventions and the destructive aspects of large scale educational efforts to incorporate the traditional into the modern system.

**Bolaria, B. (1971). Health care, health and illness behavior of American Indians in the state of Maine. Augusta, ME: Regional Medical Program Research and Evaluation Service. (ERIC Document Reproduction Service No. ED 065 803)**

This research monograph contained findings based on studies conducted by Maine's Regional Medical Program Research and Evaluation Service from interviews of 90 families in Indian communities. The report included self-evaluation of health, patterns and sources of medical care, attitudes toward health care, perception of services, and survey results. Data showed that over three-fourths of the families had various health and medical problems which needed immediate attention. Medical problems were viewed as being related closely to poverty, lack of services, and previous illness. Ill health of the poor was accentuated by high medical costs, inequitable distribution of health personnel and facilities, and a loosely integrated system of health care delivery.

**Boyce, W. T., Crowley, B., Hays, S., Curtis, J., & McClure, E. (1982). Medical and developmental outcomes among Navajo infants from high-risk social environments. Arizona Medicine, 39(5), 318-319.**

The authors examined medical and developmental outcomes during the first year of life in a cohort of biologically normal Navajo infants (n=47), each of whom met at least one conventional criterion for social or environmental risk. The primary objective of the study was to provide a descriptive survey of selected health outcomes among environmentally at-risk Navajo infants. A second objective was to assess the degree to which individual risk factors were associated with adverse outcomes within the cohort of high-risk infants. Examination of health outcomes by

presence or absence of individual risk factors revealed no consistent associations among the 47 newborns. Results indicated that within "high-risk" cohorts, none of the conventional risk factors were an important predictor of health outcome. Conclusions suggested that conventional criteria for social or environmental risk may be less applicable in specific populations or in cross-cultural settings.

**Brelsford, G. (1985). The impacts of alternative funding policies for ambulatory care services on hospitalization in the Indian Health Service contract health care program in Cordova, Alaska. Alaska Medicine, 27(2), 31-34.**

This study documented the impact of alternative funding policies for ambulatory care services on hospitalization in the Indian Health Service Program in Cordova, Alaska. An 18-month longitudinal comparison of program performance under each of two policies from April, 1977 to March, 1980 was conducted. Under the enhanced ambulatory care policy both hospitalization and total program expenditures were reduced significantly. This was accomplished by increasing the availability of ambulatory outpatient services at an early stage in the individual's illness to preclude the need for hospitalization. In view of the increasing costs of health care and hospitalization, this approach appears to offer one feasible long term solution to the problem of the high cost of hospital care.

**Broudy, D. W., & May, P. A. (1983). Demographic and epidemiologic transition among the Navajo Indians. Social Biology, 30(1), 1-16.**

The authors analyzed mortality and natality data of Navajos which was compiled by the Indian Health Service. Higher-than-average mortality rate reflected death caused by vehicle accidents, alcoholism, suicide, homicide, and cirrhosis of the liver. In addition to public awareness and emergency medical services, culturally sensitive economic development was encouraged. Demographic and epidemiologic



transitions were underway among the Navajos. Major implications for social and health planning with Navajo people resulted in social change toward modernization.

**Coulehan, J. L. (1980). Navajo Indian medicine: Implications for healing. The Journal of Family Practice, 10(1), 55-61.**

The author examined the parallel practices of treatment by both traditional medicine men and physicians on the 25,000 square mile Navajo Reservation. Most Navajos who are seriously ill use both systems of health care. This natural experiment of coexistence emphasized several general characteristics of all healing. Traditional ceremonies were successful because they were integrated into Navajo belief systems and met needs of sick people who preferred to bypass Western medicine. Physicians and other healers simply removed obstacles to the body's restoration of homeostasis or, as the Navajos say, to harmony. Reductionism limits the spectrum of obstacles considered relevant (e.g., causes of illness), but an alternate model might include emotional, social, or spiritual phenomena equally as significant to healing as are biochemical phenomena. In that context, nonmedical healers, as well as physicians, can potentially influence factors relevant to getting well.

**deMontigny, L. H. (1970). Health factors influencing education of American Indians (A position paper). Albuquerque, NM: Southwestern Cooperative Educational Lab. (ERIC Document Reproduction Service No. ED 057 957)**

The author emphasized health, culture, education, and economics as being mutually interdependent and which must be evaluated and planned jointly. Concerns identified in the discussion were general health, nutrition, fever and chronic illness, hearing, sight, and mental health. Recommendations were made to conduct or implement the following: (a) evaluation of health conditions on a community-wide basis; (b) evaluation of family-oriented nutrition surveys to determine nutritional

status of Indian communities; (c) evaluation of medical histories of each child of preschool or school age to include a medical examination; and (d) audiometric screening and evaluation of children as young as possible to detect any loss of sound pitch. Visual concerns and mental health were also addressed.

**Department of Education Clearinghouse (1982). HHH announces formation of health resources and service administration. (Programs for the Handicapped No. 5, p. 8). Washington, DC: Health Resources and Service Administration.**

In this report, the Department of Education Clearinghouse on the Handicapped described the mission and organization of the Health Resources and Service Administration (HRSA). This new agency within Public Health Service is meant to provide direction to existing programs and to assist in the development of new programs which provide direct services to special populations. Four agencies are involved in HRSA: (a) Bureau of Health Care Delivery & Assistance, (b) Indian Health Service, (c) Bureau of Health Maintenance Organization & Resources, and (d) Bureau of Health Professions.

**Department of Health and Human Services (1985). Black & minority health. Report of the Secretary's Task Force. Volume 1: Executive summary. Washington, DC: Department of Health and Human Services. (ERIC Document Reproduction Service No. ED 263 293)**

This volume contains major findings and recommendations of the Department of Health and Human Service's (DHHS) Task Force on Black and Minority Health. Recommendations, based on data collected from a number of sources, were intended to guide DHHS in developing programs and policies that address the continuing disparity in the burden of death and illness experienced by Blacks and other minority Americans compared with the national population. The report was divided into three major sections. The first section consists of a general introduction and an overview of Task Force activities. The second section provides recommendations that

are organized into six categories: (a) health information and education, (b) delivery of financing health services, (c) health professions' development, (d) cooperative efforts with the non-Federal sector, (e) data development, and (f) research agenda. Section three included findings under six headings which accounted for health status disparity: (a) social characteristics of minority populations; (b) mortality and morbidity indicators; (c) summary reports of the task force subcommittees on cancer, cardiovascular and cerebrovascular diseases; chemical dependency; diabetes; homicide, suicide, and unintentional injuries; and infant mortality and low birthweight; (d) health services and resources for minority populations; (e) inventory of DHHS program efforts; and (f) survey of non-Federal organizations. Appendices included lists of the members of the task force, subcommittees, staff, and commissioned papers.

**Dietrich, A., & Olson, A. (1981). Political and cultural factors in achieving continuity with a primary health care provider at an Indian Health Service hospital. Public Health Reports, 96(5), 398-403.**

The authors described the establishment of a primary health care system at Zuni-Ramah Indian Health Service (IHS) Hospital and Clinic in New Mexico. Continuity and coordination of care were added to a health care system that was already accountable, accessible, and comprehensive. The new system offered each patient a personal health care provider who worked as a member of a multi-disciplinary team. In changing the health care system, special attention was given to the cultural and political setting of the village of Zuni. The process of planning and consultation helped anticipate and alleviate the community's concerns, but resistance from physicians was unexpected. A flexible approach has led to a gradual acceptance of this voluntary system. This experience with the people of Zuni village showed that a primary care system can be started in a rural IHS facility with minimal outside help. Apparent improvements in quality of care make

the continuity of primary care worthy of further consideration in the IHS and similar health service systems.

**Friedman, E. (1979). The possible dream: The Navajo Nation Health Foundation. Hospitals, 53(20), 81-84.**

Ten years ago, Hospitals reported on a plan by Project Hope to train Navajos in hospital and clinic operations with the long-term goal of turning over a small health system on the Navajo Reservation to the local residents. When Hospitals returned to determine if the hopes of 1969 had become reality they found: (a) that the Navajo Nation Health Foundation had been formed in 1974; (b) available facilities consisted of Sage Memorial Hospital, the Wide Ruins Clinic, a clinic at Klagetoh, and an extensive home health care program; (c) the spirit of cooperation with traditional medicine was highly respected and combined with new medicine; (d) improved mental health care; and (e) improved patient education. Project Hope also worked to develop an interest in health careers among Navajo students.

**Giacalone, J., & Hudson, J. (1975). A health status assessment system for a rural Navajo population. Medical Care, 13(9), 722-735.**

The authors provided an analysis of the first year's operation of an ambulatory patient monitoring system. The program was designed to accomplish the following objectives: (a) to demonstrate individual clinic effectiveness by providing a complete health status assessment to each member of its service population; and (b) to implement patient surveillance for follow-up and periodic reevaluation. The system was adapted to the pre-existing computer-based ambulatory patient care reporting mechanism which was in use at Indian Health Service and contracting facilities. Definitions of discrete health status categories were based on specific clinical criteria. This approach permitted interpretation of categorical patient

flow statistics as representative of identifiable clinic practices. Quarterly data printouts provided a basis for interpreting the degree of clinic progress toward initial health assessment of the total population served. Such data, when viewed against the backdrop of specific operational objectives, allow for continuous program reassessment of community needs, and provide a technique for monitoring the effectiveness of the health care delivery system in meeting these needs.

**Giago, T., & Illoway, S. (1982). Dying too young. Perspectives: The Civil Rights Quarterly, 14(3), 28-33.**

The authors examined poor health conditions and health problems of American Indians. Health programs for American Indians have been grossly underfunded from the beginning, and the diminishing commitment of the American government to such programs threatens to worsen an already low Indian index.

**Guilmet, G. M. (1984). Health care and health care seeking strategies among Puyallup. Culture, Medicine and Psychiatry, 8(4), 349-369.**

Standardized interviews were conducted among 80 Puyallup families to determine family health practices and beliefs, and to ascertain patterns of referral to professional practitioners. Comparisons were made between Puyallup and Taiwanese family health care practices and health care seeking processes. Traditional medical systems of the Puyallup were affected profoundly by contact with Western culture. The rates of home treatment were smaller and rates of referral to professional practitioners were greater than rates among the Taiwanese, where traditional medicine exists as a common alternative to Western medical practices. It was concluded that the relative absence of folk medicine and the availability of free medical care among the Puyallup were the most important factors causing the variance between rates of family treatment and patterns of health care seeking behaviors in the two cultures.

**Hammerschlag, C. A. (1982). American Indian disenfranchisements: Its impact on health and health care. White Cloud Journal, 2(4), 32-36.**

This paper, presented to the Psychiatric Institute Foundation concerning Native American illness in psychohistorical terms, described factors that show Native Americans to be suffering from the same symptoms as other victims of genocidal persecution. The anger and frustration that the Native American feels becomes directed toward the self and toward one's ancestry. As a result, most Indians today have no personal recollection of a past filled with brilliance and grandeur. The hopelessness and helplessness often exhibited by Native Americans are now trying to be understood through a biochemical perspective. The author concluded that in order for Indian mental health, and health in general, to improve, there must be an emergence of tribal interdependence and a renewed pride in Indian heritage.

**Indian Health Service. (1985). Indian Health Service: A comprehensive health care program for American Indians and Alaska Natives. Rockville, MD: Indian Health Service. (ERIC Document Reproduction Service No. ED 262 940)**

This report portrayed the comprehensive health care (preventative, curative, rehabilitative, and environmental) of more than 930,000 eligible American Indians and Alaska Natives as being the responsibility of the Indian Health Service (IHS). History of the U.S. Public Health Service since 1955 was presented with regard to its role in raising the health status of American Indians and Alaska Natives, following policies outlined in Public Laws 93-638, 94-437, and 96-537. The number of hospitals, health centers, school health centers, health stations and clinics on reservations was included. Major health related problems which existed in high proportions among American Indians and Alaska Natives were identified. Maps and tables were included of IHS facilities, vital statistics, and services rendered. Photographs and IHS administrative office addresses were also included.



**Kaltenbach, C. (1975). Health problems of the Navajo area and suggested intervention. Washington, DC: Department of Health, Education, and Welfare. (ERIC Document Reproduction Service No. ED 164 148)**

Analysis of morbidity, mortality, and demographic data on Navajo people was undertaken to identify leading health problems in the Navajo area and to suggest intervention activities. Comparisons with the total U.S. population were made. Data on Navajo mortality showed: (a) a ratio of male to female death of 2:1; (b) more than 50% of deaths occurred in persons 44 years old or younger; (c) mortality rates exceeded U.S. rates for ages up to 45 years; (d) median age of death was 42.3 (71.22 for the total U.S. population); (e) most common cause of death was accidents (primarily auto accidents); and (f) the Navajo postnatal death rate was more than twice that of the general U.S. population. Inpatient morbidity data showed hospitalization was most often due to: deliveries and complications of pregnancy, accidents, poison, violence, respiratory problems (60% from pneumonia), and infective/parasitic diseases. Most common causes of outpatient morbidity were respiratory illnesses, supplemental care, infective/parasitic diseases, accidents, poison, and violence. Children, birth to 4 years of age, were at high risk for infectious diseases. Alcoholism contributed significantly to the high rate of morbidity. Data suggested sanitation, housing, nutrition, and behavior as underlying causes for many conditions. Educational, environmental, and personal health care measures for reducing morbidity and mortality for 20 diseases were outlined.

**Kunitz, S. J. (1981). Underdevelopment, demographic change, and health care on the Navajo Indian Reservation. Social Science Medical, 15A, 175-192.**

Employing a historical approach, the author described the Navajo Reservation as an underdeveloped nation. The consequences were examined in terms of demographic response, organization and utilization of health services, and employment patterns within the service sector, generally, and in health care, specifically. In some

respects, health care and other services served as a misplaced target for anger and frustration which could have been directed toward fundamental concerns such as control of natural resource extraction, and control of local business and industry. The author expressed the hope that focusing on health care would also teach people that problems are personal and individual.

**Kunitz, S. J. (1984). And still more Navajo! Contemporary Sociology, 13(5), 566-568.**

The review essay of Stephen J. Kunitz's Disease Change and the Role of Medicine: The Navajo Experience examined the Navajo's changing patterns of mortality and the relationship between modern and traditional Navajo medicine. The major health issues were delineated in an overview of the social role among Indian people. From this, the role of medicine will become one of defining what is a health problem and teaching/socializing the Navajo people into these new modes of definitions. The author emphasized the necessity for improving the living standards of Navajos and other Native American people.

**Lake, R. G. (1982). A discussion of Native American health problems, needs, and services, with a focus on northwestern California. White Cloud Journal, 2(4), 23-31.**

The author discussed Native American health problems from an endogenous perspective. Drawing on 10 years of experience as a shaman apprentice and novice shaman, the author discussed the hypothesis that historical experience of contact with, and ultimate domination by the largely Anglo, European-American culture, has contributed to the high rate of mental and physical disturbances found in Native American populations. The author expressed that cultural differences between Indian and Anglo groups, particularly in the health and medical professions, has led to the problem of inadequate health care services.



**Mahmoudi, H. (1984). A cross-cultural survey of health care: American Indian and United States populations. Salt Lake City, UT: Westminster College.**

The author presented a cross-cultural comparison of major health care characteristics among the American Indian and Anglo populations, based on vital health statistics from various government agencies and research papers. The relationship between culture (or subculture) and health care systems as related to these two populations was discussed. Although American Indians reside in a highly modern, industrialized, and economically wealthy nation, their health profile is atypical of the general U.S. population, and characteristic of poor, less-developed populations found in third world nations. Major hindrances with the present U.S. health care delivery system were discussed, and possible solutions to the dilemma were offered.

**McCreary, C., Deegan, C., & Thompson, D. (1973). Indian health in Minnesota. Minnesota Medicine, 49(3), 169-175.**

This report consisted of four main areas of discussion: (a) conventional health level indications of Native Americans in Minnesota; (b) information on health care and socio-economic conditions collected through a survey of Indian families in Minneapolis; (c) information about Indians who visited the emergency room of Hennepin County General Hospital; and (d) statements made by Minnesota health professionals about Indians and by Minnesota Indians about health professionals. It was found that: (a) Indian people suffer from lower health levels than do Anglo individuals; (b) Indian people do not use health services effectively; (c) Indian people live under difficult socio-economic conditions; and (d) there is a poor relationship between health professionals and Indians.

**Oetinger, G. (1980). Running against the wind: The human factor. Patients' perspectives of traditional Navajo healing practices presently used on the reservation. Tsaile, AZ: Navajo Community College, Mid-South Sociological Association.**

The author explored the relationship between use of traditional healing practices and sociocultural and economic changes that have taken place on the Navajo Reservation. The ongoing process of "getting well" was analyzed through the eyes of the patient and through the use of normative historical and sociocultural variables.

Data was collected over a period of two years through informal conversations, structured interviews, review of anthropological literature, and participant observation. Two major criteria were used in the selection of patients: (a) the nature of the ceremony performed on the individual; and (b) an attempt to achieve a diversity of patient profiles. Six transitional stages in the process of "getting well" were identified.

**Primeaux, M. C. (1979). Health care and the aging American Indian. Current Practice in Gerontological Nursing, 1, 130-138.**

The author explained the historical aspects of the American Indians' health care, customs, and rituals in relation to health care. In addition, evolution of rituals and customs involving death and burial were discussed. Statements on Indian health care were advanced in hopes of helping the reader to understand how cultural and social forces shape attitudes and behaviors of the elderly in the Native American population. To fully understand the aged, one must understand their background. Elders of three different Oklahoma tribes were quoted regarding care and concern of the aged.

**Public Health Service (DHEW) (1972). Pueblo de Santa Clara-A description of the perceived health needs of the people of Santa Clara Pueblo and the management processes involved in the delivery of health services to them. Washington, DC: Indian Health Service Training Center, Training Course TC-72-2. (ERIC Document Reproduction Service No. ED 154 975)**

Members of the health services management class conducted a descriptive study of the perceived health problems of the people of Santa Clara Pueblo and the management processes involved in the delivery of health services to them. Data were obtained from personal interviews with 38 tribal members which included tribal officials, health service delivery employees, IHS Service Unit employees, and a Health Board member. Information was also obtained from analyses of contracts between the Pueblo and other federal agencies, position descriptions, and organizational charts of the Service Unit. Findings of the study included: (a) the majority of interviewees identified the physician as the key resource in the delivery of health services; (b) tribal members were concerned about lack of permanent personnel; (c) consumers felt they had little influence on the health care system; (d) all groups mentioned alcoholism and chronic diseases as major problems; (e) as a primary resource, role of the Community Health Representative was perceived differently by Service Unit personnel than by the other groups; (f) transportation was mentioned most frequently by all groups as the least important health service; (g) sanitation was mentioned most frequently as the most satisfactory health service; (h) tribal members indicated that emergency care, personnel, and facilities were the most important health services; and (i) Service Unit personnel identified health education and preventive medicine as the two most important health services.

**Rabeau, E. S., & Erickson, C. J. (1974). Health care problems of the American Indians. ISA Transactions, 13(4), 319-325.**

Problems faced by the Indian Health Service in raising the status of Indian people were presented. A systems approach to these problems was described which

incorporated the development of new tools and methods for improving services. These new tools and methods have led to more efficient use of existing resources in improving the health status of the Indian people. Attempts to improve services included planning strategies, establishment of standards, performance assurance, evaluation, delivery operations, and modification of methods.

**Shah, C. P., & Farkas, C. S. (1985). The health of Indians in Canadian cities: A challenge to the health care system. Canadian Medical Association Journal, 133 (9), 859-863.**

The fact that Canadian Native people living on reserves have high morbidity and mortality rates is well known, but less is known about the health of those who migrated to urban centers. Studies have shown high rates of mental health problems, injuries, hospital admission, and specific diseases. There is evidence that cultural differences create barriers to the use of health care facilities. The cultural differences and low socioeconomic status and discrimination that is found in cities are identified as blocks to good health and adequate health care.

**Spencer, L. K. (1984). Indian Health Services: A changing environment. Dimensions in Health Service, 61(4), 25-26.**

The author described the unique health care delivery system found in the Indian Health Service. Delivery of funding is more global, rather than segmented, and isolation of communities requires nursing and community health representatives to act as primary health care workers. Another significant factor was found in the medical history of Indians since the arrival of the White man. Indians have been susceptible to "White man's" diseases, therefore, specific programs have been developed and implemented for treatment. Success of health programs was noted, and a suggestion was made to transfer the responsibility of health care delivery services over to the Indian in a mutually planned and organized manner.

**Spivey, G. H. (1977). The health of American Indian children in multi-problem families. Social Science and Medicine, 11(5), 357-359.**

This study addressed the susceptibility to illness of children from multi-problem families. Health histories from Indian Health Service charts of American Indian children under 10 years of age and from families with multiple psychosocial problems were compared with those of children from adequate functioning families. Multiple problems were defined as the existence of at least three psychosocial problems (e.g., alcoholism in family, physical abuse, separation of parents, failure of father to work) within a family. Distinct differences were found during the first year of life, with multi-problem families having more illness and less well-baby care than children of the control-group families. It was concluded that children of multi-problem families would benefit from special medical and social services, particularly those services that improve general socioeconomic and environmental conditions.

**Stewart, T., May, P., & Muneta, A. (1980). A Navajo health consumer survey. Medical Care, 18(12), 1183-1195.**

The authors reported findings from a health consumer survey of 309 Navajo families in three areas of the Navajo Reservation. Findings indicated that access to facilities and lack of safe water and sanitary supplies are continuing problems for these families. Families did show consistent use of Indian Health Service personnel, particularly nurses, pharmacists, and physicians, as well as traditional Navajo medicine practitioners. The discussion offered three conclusions: (a) attitudes regarding free health care may be a factor for Navajo people and other groups; (b) cultural considerations are often ignored or accepted as truisms in delivering care; and (c) the Navajo Reservation may serve as a unique microcosm of health care in the U.S.

**Wallace, H. M. (1973). The health of American Indian children: A survey of current problems and needs. Clinical Pediatrics, 12(2), 83-87.**

The author noted the marked discrepancy between the health status of American Indian children and other American families. Demographic information relevant to the health of Indian children was given. A lower median age of American Indians (17.3 years) and Alaska Natives (16.3 years), as compared with 29.5 years for the general U.S. population (1960), necessitates a greater emphasis on health care facilities for American Indian youth. In 1969, the birth rate for American Indians and Alaska Natives (39.2 and 31.5 per 100,000) was about twice that of the U.S. population. A high birth rate creates concerns regarding health of both mother and child. Although infant mortality rates were declining for American Indians and Alaska Natives (30.1 and 55.6 per 1,000 live births) these rates were still higher than the general population (22.4 per 1,000 live births). Other health issues affecting American Indians and Alaska Natives included malnutrition, mental health and the most recent health problems of youths.

**Williams, H. (1977). A perspective on health on the Navajo Indian Reservation. Journal of the Tennessee Medical Association, 70(7), 475-480.**

The author discussed current conditions of Indian health on the Navajo Reservation. Utilization of services by Indians in the six Public Health Service hospitals was described. The current infant mortality rate was discussed. Also, statistics were given which accounted for the different types of admissions. The author concluded by giving a rationale for the establishment of a medical school for American Indians. An Indian medical school located on the Navajo Reservation would provide training in a cultural, economic, and medical setting. This type of setting would encourage graduates to remain with their own people.

**Young, T. K. (1981). Primary health care for isolated Indians in northwestern Ontario. Public Health Reports, 96(5), 391-403.**

The author described delivery of primary health care services in a region of isolated villages. Issues and practical considerations in providing health services to people in isolated and underdeveloped areas were discussed. The article also addressed the organization of the health care system and the kinds of services provided to Indians in northwestern Ontario. Use of transportation and communication facilities were discussed in detail, and data from a community health survey was used to evaluate effectiveness of mode of health care delivery in the region.